

**First records of *Phloiotrya rufipes* (Coleoptera: Melandryidae) in Hungary,
with a national checklist of the family**

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Abstract – The false darkling beetle *Phloiotrya rufipes* (Gyllenhal, 1810) is recorded from Hungary for the first time. A checklist of Melandryidae known to occur in Hungary is given. With 2 figures.

Key words – *Phloiotrya rufipes*, *Abdera affinis*, *Dircaea australis*, Melandryidae, faunistics, new record, Hungary

INTRODUCTION

The saproxylic false darkling beetle *Phloiotrya rufipes* (Gyllenhal, 1810) is one of the three species of genus *Phloiotrya* Stephens, 1832 in Central Europe. It is known from Austria, Belgium, Bosnia and Herzegovina, Belarus, Croatia, Czech Republic, Finland, France, Great Britain, Germany, Italy, Latvia, Moldavia, the Netherlands, Norway, Poland, Romania, Serbia and Montenegro, Slovakia, Slovenia, Sweden, Switzerland and Ukraine (NIKITSKY & POLLOCK 2008). It was recently recorded by KONVIČKA (2012) from Greece. Larvae of *Phloiotrya rufipes* live in rotten wood (NIKITSKY & POLLOCK 2010). This paper is devoted to record *Phloiotrya rufipes* for the first time from Hungary and to provide a new checklist of Melandryidae in Hungary.

Abbreviations – HNHM = Hungarian Natural History Museum (Budapest); PLM-KM = Petőfi Literary Museum – Kazinczy Museum (Sátorajauhely); coll. = collectio, det. = determinavit, lgt. = legit, revid. = revidit.

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PHLOIOTRYA RUFIPES IN HUNGARY

In Hungary, *Phloiотrya rufipes* was collected in the following two localities. Borsod-Abaúj-Zemplén county: Bükk National Park, Cserépfalu, Odorvári rom, 1 specimen sifted in *Fageto-Quercetum*, 18.VI.2005, lgt. et coll. Jan Pelikán (Hradec Králové, Czech Republic), det. Ondřej Konvička; Vas county: Őrségi National Park, Farkasfa, Fekete-tó, 2 specimens beaten from dead branch of *Alnus* sp., 10.VI.2006, lgt., det. et coll. J. Pelikán, revid. O. Konvička.

In the “Heteromera I.” issue of the series *Magyarország Állatvilága (Fauna Hungariae)*, KASZAB (1957) mentioned *P. rufipes*, but the name stands in brackets. This means that the species occurs in the former Kingdom of Hungary, but not within the present-day boundaries of Hungary, and its occurrence in the country is expected. The three Central European *Phloiотrya* species can be identified with the help of KASZAB (1969).

CHECKLIST OF MELANDRYIDAE OF HUNGARY

The family of false darkling beetles (Melandryidae) is represented in Hungary by 24 species, belonging to 15 genera of 2 subfamilies. The last comprehensive treatment of the Hungarian species was provided by KASZAB (1957). Further species were added by CZETŐ *et al.* (1985) and MERKL (2006).

The following species should be deleted from the Hungarian faunal lists.

Abdera (Caridua) flexuosa (Paykull, 1799) was mentioned from Hungary by NIKITSKY & POLLOCK (2008), but no voucher specimen from present-day Hungary is available. KASZAB (1957) put its name in brackets, indicating that the species is known from the area of the former Kingdom of Hungary (in this case from the Carpathians) but not from present-day Hungary. According to the known distribution the occurrence in Hungary is presumable.

Dircaea quadriguttata (Paykull, 1798) was mentioned by KASZAB (1957) from Budapest, but no voucher specimen from present-day Hungary is available.

Marolia purkynei Mařan, 1933 was mentioned by KASZAB (1957) from Hungary, without more exact locality, but no voucher specimen from present-day Hungary is available.

Orchesia (Clinocara) blandula Brancsik, 1874 was mentioned by KASZAB (1957, also cited by SZALÓKI 2001) from Siófok, but this record is erroneous, based on mislabelled specimens. According to the known distribution the occurrence in Hungary is presumable.

Phryganophilus ruficollis (Fabricius, 1798) was mentioned by KASZAB (1957) from Hungary, based on specimens from the 19th century with label text

“Hungaria, E. Frivaldszky”, but without exact locality. These must have been collected somewhere in the area of the former Kingdom of Hungary, but outside present-day Hungary (most probably in Romania).

In the subsequent checklist, every species name is followed by references, which are based on reliably identified specimens from Hungarian localities. Synonymy is restricted to names mentioned in the Hungarian literature. Hungarian vernacular names are proposed for all species and subfamilies.

Melandryidae Leach, 1815 – Komorkafélék
Melandryinae Leach, 1815 – Igazikomorka-formák

Abdera Stephens, 1832

Abdera Stephens, 1832

Abdera (Abdera) quadrifasciata (Curtis, 1829): KASZAB (1957), SZALÓKI (1993), MERKL (2010) – négysávós komorka

Caridua A. Strand, 1929

Abdera (Caridua) affinis (Paykull, 1799): KASZAB (1957) – fenyves-komorka

Anisoxya Mulsant, 1856

Anisoxya fuscula (Illiger, 1798): KASZAB (1957), SZALÓKI (1993, 1996, 1999), MERKL *et al.* (2011) – barna komorka

Dircaea Fabricius, 1798

Dircaea australis Fairmaire, 1856: KASZAB (1957) – déli komorka

Dolotarsus Jacquelin du Val, 1863

Dolotarsus lividus (C. R. Sahlberg, 1833): KASZAB (1957), SZALÓKI (1999) – varratsávós komorka

Hypulus Paykull, 1798

Hypulus bifasciatus (Fabricius, 1792): KASZAB (1957), SZALÓKI (1993, 1996, 1999), KOVÁCS *et al.* (2010) – öves komorka

Hypulus quercinus (Quensel, 1790): KASZAB (1957), KOVÁCS *et al.* (2010) – tölgy-komorka

Melandrya* Fabricius, 1801Melandrya* Fabricius, 1801

Melandrya (Melandrya) barbata (Fabricius, 1787): CZETŐ *et al.* (1985), SZALÓKI (1993), KOVÁCS *et al.* (2012) – vöröslábú komorka

Melandrya (Melandrya) caraboides (Linnaeus, 1760): KASZAB (1957), SZALÓKI (1993, 1997, 1999) – fémkék komorka

***Paramelandryia* Nikitsky, 2002**

Melandrya (Paramelandryia) dubia (Schaller, 1783): KASZAB (1957), SZALÓKI (1993), KOVÁCS *et al.* (2010, 2012) – fekete komorka

Orchesia* Latreille, 1807Clinocara* C. G. Thomson, 1859

Orchesia (Clinocara) fasciata (Illiger, 1798): KASZAB (1957), SZALÓKI (1993, 1996, 1999, 2001), MERKL (2010) – szalagos szöcskebogár

Orchesia (Clinocara) grandicollis Rosenhauer, 1847: CZETŐ *et al.* (1985), SZALÓKI (1993) – szélesnyakú szöcskebogár

Orchesia (Clinocara) minor Walker, 1837: KASZAB (1957), SZALÓKI (1993, 1996, 1999, 2001) – kis szöcskebogár

Orchesia (Clinocara) undulata Kraatz, 1853: KASZAB (1957), SZALÓKI (1993, 1996, 1997, 1999, 2001), MERKL (2010) – hullámos szöcskebogár

***Orchesia* Latreille, 1807**

Orchesia (Orchesia) micans (Panzer, 1793): KASZAB (1957), SZALÓKI (1993, 1999, 2001) – fényes szöcskebogár

***Phloiotrya* Stephens, 1832 (= *Phloeotrya* Agassiz, 1846)**

Phloiotrya rufipes (Gyllenhal, 1810): present paper (Fig. 1) – fényes nyári-komorka

Phloiotrya tenuis (Hampe, 1850) (= *vaudoueri* Mulsant, 1856): KASZAB (1957), SZALÓKI (1997), MERKL (2010) (Fig. 2) – nyúlánk nyárikomorka

***Rushia* Forel, 1893**

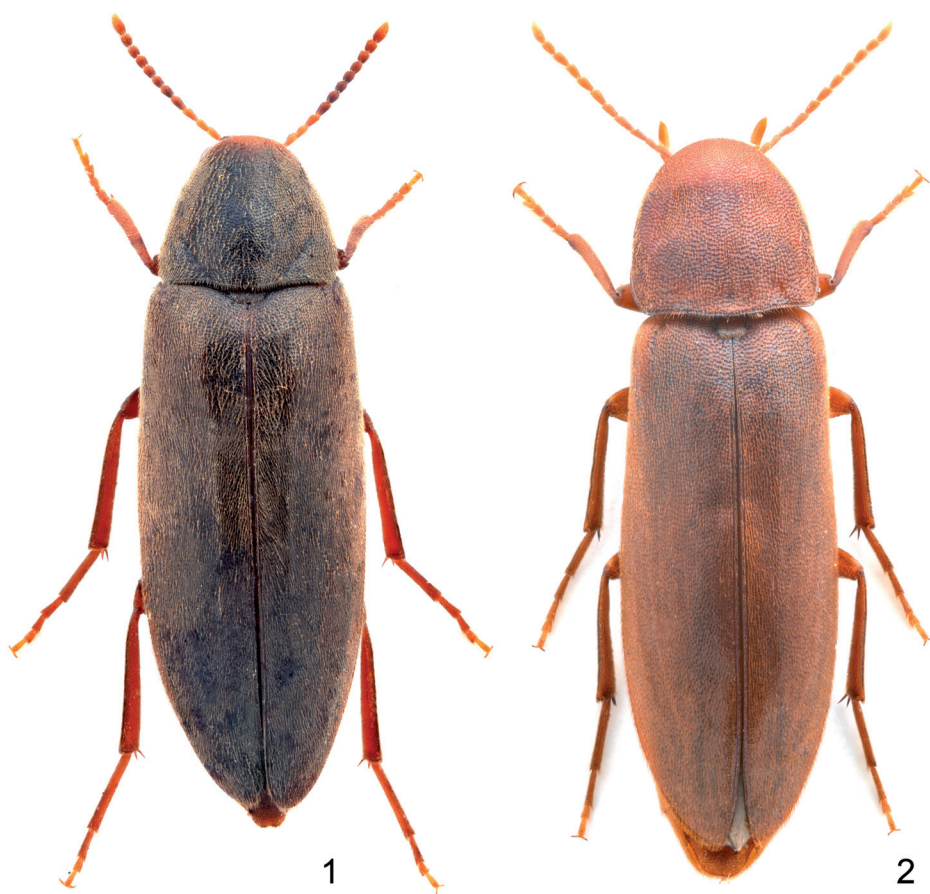
Rushia parreyssii (Mulsant, 1856): Merkl (2006) – sárgalábú komorka

Serropalpus Hellenius, 1786

Serropalpus barbatus (Schaller, 1783): KASZAB (1957), SZALÓKI (1996, 1999) – farontó komorka

Xylita Paykull, 1798

Xylita laevigata (Hellenius, 1786) (= *buprestoides* Fabricius, 1792): KASZAB (1957), SZALÓKI (1993, 1996, 1999, 2001) – selymes komorka



Figs 1–2. Habitus of *Phloiotrya* species occurring in Hungary: 1 = *P. rufipes* (Gyllenhal, 1810), 2 = *P. tenuis* (Hampe, 1850)

Wanachia Schulze, 1912

Wanachia triguttata (Gyllenhal, 1810): MERKL (2006, 2010), MERKL *et al.* (2011) – háromcseppes komorka

Zilora Mulsant, 1856

Zilora obscura (Fabricius, 1794) (= *eugeniae* Ganglbauer, 1891; = *sericea* J. Sturm, 1807): MERKL (2006), KOVÁCS *et al.* (2012) – sötét komorka

Osphyinae Mulsant, 1856 – Cserjekomorka-formák

Conopalpus Gyllenhal, 1810

Conopalpus testaceus (A. G. Olivier, 1790): KASZAB (1957), SZALÓKI (1993, 1997, 2001), MERKL (2010) – feketecsápú cserjekomorka

Osphya Illiger, 1807

Osphya bipunctata (Fabricius, 1775): KASZAB (1957), SZALÓKI (1993, 1997, 1999, 2001), MERKL (2010), MERKL *et al.* (2011) – kétalakú cserjekomorka

NOTES ON SELECTED SPECIES

The last Hungarian records of the following two rare species are nearly 60 years old (KASZAB 1957). However, they were found in Hungary more recently. Their collecting data are listed hereunder (the number of specimens and the depositories are in parentheses).

Abdera affinis (Paykull, 1799) – **Baranya county.** Almamellék: Sasrétpuszta, taplóról [= from bracket fungus], 15.VIII.2013, lgt. Dezső Szalóki (2, coll. D. Szalóki, Budapest). **Borsod-Abaúj-Zemplén county.** Bózsza: Páska-hegy-tető, 1.VIII.2007, lgt. Gábor Hegyessy (1, PLM-KM). **Fejér county.** Bicske: Somos, bükkaplóból nevelve [= reared from hoof fungus, *Fomes fomentarius*], II–III.2014, lgt. Tamás Németh (2). **Pest county.** Szokolya: Vaszazék-völgy, gyertyános-tölgyes [= hornbeam-oak forest], száraz ágakról [= from dry branches], 17.VIII.2008, lgt. Ottó Merkl & Tamás Németh (1).

Dircaea australis Fairmaire, 1856 – **Nógrád county.** Diósjenő: Nyír-rét, 6.VII.1970, lgt. Lajos Szőke (2, coll. D. Szalóki, Budapest); Litke: Bükk alja-erdő, 1.VII.2005, lgt. Gábor Hegyessy (1); Nógrád: Farkas-völgyi-erdő, ablakcsapda [= window trap], 23.VI.2005, lgt. Miklós Sárospataki (1). **Pest county.** Szokolya: Szállásoki-rétek, N47.9090°, E18.9809°, 8.VI.2015, lgt. Aranka Grabant, Zoltán György, Gergely Katona & Ottó Merkl (2); Vác, Naszály, É-i oldal [= northern

side], bükkös [= beech forest], gombás ágról kopogtatva [= beaten from fungusy branch], 3.VII.2013, lgt. Attila Kotán, Tamás Németh & Gábor Seres (1).

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REFERENCES

- CZETŐ Zs., PODLUSSÁNY A. & SZALÓKI D. 1985: Új fajok Magyarország bogárfaunájában (Coleoptera). (New species in the Coleoptera fauna of Hungary.) – *Folia entomologica hungarica* **46**: 270–272.
- KASZAB Z. 1957: Felemás lábfejjű bogarak I. – Heteromera I. – In: *Magyarország Állatvilága (Fauna Hungariae)*, IX, 1. Akadémiai Kiadó, Budapest, 126 pp.
- KASZAB Z. 1969: 80. Familie: Serropalpidae (Melandryidae). – In: FREUDE H., HARDE K. W. & LOHSE G. A. (eds): *Die Käfer Mitteleuropas, Band 8. Terebrantia, Heteromera, Lamellicornia*. Goecke & Evers, Krefeld, pp. 196–213.
- KONVIČKA O. 2012: Notes on the distribution of beetles of the families Melandryidae and Tetratomidae in the Western Palaearctic region. – *Klapalekiana* **48**: 203–206.
- KOVÁCS T., MAGOS G. & URBÁN L. 2010: Ritka és természetvédelmi szempontból jelentős rovarok (Insecta) a Mátra és Tarnavidék területéről II. (Rare and protected insects (Insecta) in the area of the Mátra and Tarnavidék II.) – *Folia historico-naturalia Musei Matraensis* **34**: 181–195.
- KOVÁCS T., MAGOS G. & URBÁN L. 2012: Ritka és természetvédelmi szempontból jelentős bogarak (Coleoptera) a Mátra és a Bükk területéről (Rare and protected beetles (Coleoptera) in the area of the Mátra and the Bükk.) – *Folia historico-naturalia Musei Matraensis* **36**: 31–41.
- MERKL O. 2006: New beetle species in the Hungarian fauna (Coleoptera). – *Folia entomologica hungarica* **67**: 19–36.
- MERKL O. 2010: A Naszály bogárfaunája (Coleoptera). (Beetles (Coleoptera) of Mt Naszály (Hungary).) – In: PINTÉR B. & TÍMÁR G. (eds): *A Naszály természetrajza. Tanulmánygyűjtemény. (A natural history of Mt Naszály, Hungary.) Rosalia (A Duna-Ipoly Nemzeti Park Igazgatóság tanulmánykötetei, 5.)* Duna-Ipoly Nemzeti Park Igazgatóság, Budapest, pp. 533–639.
- MERKL O., SZÉL Gy. & TALLÓSI B. 2011: Adatok a „Nagykőrösi pusztai tölgyesek” Natura 2000 terület bogárfaunájához (Coleoptera). (Data on the beetle fauna (Coleoptera) of the Nagykőrösi pusztai tölgyesek Natura 2000 site, Hungary.) – In: VERŐ Gy. (ed.): *Természetvédelem és kutatás a Duna–Tisza közti homokhátságon. Tanulmánygyűjtemény. (Nature conservation and research on the Sandridge of the Danube–Tisza Interfluve.) Rosalia (A Duna-Ipoly Nemzeti Park Igazgatóság tanulmánykötetei, 6.)* Duna-Ipoly Nemzeti Park Igazgatóság, Budapest, pp. 139–199.
- NIKITSKY N. B. & POLLOCK D. A. 2008: Family Melandryidae Leach, 1815. – In: LÖBL I. & SMETANA A. (eds): *Catalogue of Palaearctic Coleoptera, Vol. 5: Tenebrionoidea*. Apollo Books, Stenstrup, pp. 64–73.
- NIKITSKY N. B. & POLLOCK D. A. 2010: 11.6. Melandryidae Leach, 1815. – In: LESCHEN R. A. B., BEUTEL R. G. & LAWRENCE J. F. (eds): *Handbook of Zoology. Arthropoda: Insecta. Coleoptera*,

- Beetles. Morphology and systematics. Volume 2 (Elateroidea, Bostrichiformia, Cucujoidea partim)*. Walter de Gruyter, Berlin-New York, pp. 520–533.
- SZALÓKI D. 1993: Adatok a Bakony Tenebrionoidea faunájához (Coleoptera). (Data to the Tenebrionoidea fauna of Bakony (Coleoptera).) – *Folia Musei historico-naturalis Bakonyiensis* **12**: 73–97.
- SZALÓKI D. 1996: Az Őrség Cantharoidea, Cleroidea, Lymexylonoidea és Tenebrionoidea (partim) faunája (Coleoptera). (The Cantharoidea, Cleroidea, Lymexylonoidea and Tenebrionoidea (partim) (Coleoptera) fauna of Őrség (Western Hungary).) – *Savaria, A Vas Megyei Múzeumok Értesítője* **23**(2): 81–102.
- SZALÓKI D. 1997: A Mátra Múzeum bogárgyűjteménye, Malacodermata és Heteromera (részben) (Coleoptera). (Collection of beetles of the Mátra Múzeum, Malacodermata and Heteromera (partim) (Coleoptera).) – *Folia historico-naturalia Musei Matraensis* **22**: 145–174.
- SZALÓKI D. 1999: Az Alpokalja Elateroidea (részben), Cleroidea, Lymexyloidea és Tenebrionoidea (partim) faunája (Coleoptera). (Elateroidea (partim), Cleroidea, Lymexyloidea and Tenebrionoidea (partim) fauna of Western Hungary (Coleoptera).) – *Savaria, A Vas Megyei Múzeumok Értesítője* **25**(2): 168–204.
- SZALÓKI D. 2001: Somogy megye lágytestű és felemés lábfejűes bogarainak katalógusa (Coleoptera: Elateroidea (részben), Lymexyloidea, Cleroidea, Tenebrionoidea). (Catalogue of the Malacodermata and Heteromera of Somogy county (Coleoptera: Elateroidea (in part), Lymexyloidea, Cleroidea, Tenebrionoidea).) – In: ÁBRAHÁM L. (ed.): *Somogy fauna katalógusa. A XX. század végén Somogy megyéből ismertté vált állatfajok listája. (Catalogue of the fauna of Somogy county. A checklist of the known animal species in Somogy county at the end of 20th century.) Natura Somogyiensis 1*. Somogy Megyei Múzeumok Igazgatósága, Kaposvár, pp. 179–190.